

Title (en)

Poly(oxyalkylene) pyridyl and piperidyl esters and fuel compositions containing the same

Title (de)

Poly(oxyalkylen)pyridyl- und -Piperidylester und dieselben enthaltende Brennstoffzusammensetzungen

Title (fr)

Esters de poly(oxyalkylène)-yle et de pyridyle et pipéridyle respectivement et compositions de combustible les contenant

Publication

**EP 1057881 A3 20010124 (EN)**

Application

**EP 00304505 A 20000526**

Priority

US 32460299 A 19990602

Abstract (en)

[origin: EP1057881A2] A poly(oxyalkylene) pyridyl or piperidyl ester having the formula: <CHEM> or a fuel-soluble salt thereof; wherein A is a nitrogen-containing ring selected from the group consisting of 3-pyridyl, 4-pyridyl, 3-piperidyl and 4-piperidyl; R1 and R2 are independently hydrogen or lower alkyl having 1 to about 6 carbon atoms and each R1 and R2 is independently selected in each -O-CHR1-CHR2- unit; R3 is hydrogen, alkyl having 1 to about 100 carbon atoms, phenyl, aralkyl having about 7 to about 100 carbon atoms or alkaryl having about 7 to about 100 carbon atoms; x is an integer from 0 to 4; and n is an integer from about 5 to about 100. The poly(oxyalkylene) pyridyl and piperidyl esters of the present invention are useful as fuel additives for the prevention and control of engine deposits.

IPC 1-7

**C10L 1/22**; **C08G 65/32**; **C10L 10/00**

IPC 8 full level

**C10L 1/232** (2006.01); **C08G 65/329** (2006.01); **C08G 65/333** (2006.01); **C10L 1/06** (2006.01); **C10L 1/08** (2006.01); **C10L 1/238** (2006.01); **C10L 10/04** (2006.01)

CPC (source: EP US)

**C08G 65/33317** (2013.01 - EP US); **C08G 65/33396** (2013.01 - EP US); **C10L 1/238** (2013.01 - EP US)

Citation (search report)

- [Y] US 3303198 A 19670207 - HANS SUTER, et al
- [DPY] US 5942014 A 19990824 - NELSON KENNETH D [US]
- [DY] US 5407452 A 19950418 - CHERPECK RICHARD E [US]
- [A] EP 0801128 A1 19971015 - NIPPON OIL CO LTD [JP]
- [XY] NAKA K ET AL: "SYNTHESIS OF A STAR-SHAPED POLYMER VIA COORDINATION OF ESTER-LINKEDPYRIDYL-TERMINATED POLY(OXYETHYLENE) WITH RU(II)", MACROMOLECULAR: RAPID COMMUNICATIONS,DE,WILEY VCH, WEINHEIM, vol. 18, no. 12, 1 December 1997 (1997-12-01), pages 1025 - 1032, XP000738970, ISSN: 1022-1336
- [X] DAL POZZO A ET AL: "NEW MONOFUNCTIONAL DERIVATIVES OF POLY(ETHYLENE GLYCOL)S VIA MONOTRITYL INTERMEDIATES", MAKROMOLEKULARE CHEMIE, MACROMOLECULAR CHEMISTRY AND PHYSICS,CH,HUTHIG UND WEPF VERLAG, BASEL, vol. 190, no. 10, 1 October 1989 (1989-10-01), pages 2457 - 2461, XP000136155, ISSN: 0025-116X

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 1057881 A2 20001206**; **EP 1057881 A3 20010124**; CA 2308534 A1 20001202; JP 2001019980 A 20010123; US 6165236 A 20001226

DOCDB simple family (application)

**EP 00304505 A 20000526**; CA 2308534 A 20000511; JP 2000166789 A 20000602; US 32460299 A 19990602